CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

RESPONSE TO WRITTEN COMMENTS (December 2006)

NPDES Permit Rescission for International Business Machines (IBM) Corporation, Inc. 5600 Cottle Road, San Jose, Santa Clara County

On October 11, 2006, the Water Board circulated a Tentative Order for comments by November 15, 2006. The Water Board received timely written comments dated November 14, 2006, from IBM. IBM makes numerous reference to a General Permit. This General Permit is the Water Board's Order No. R2-2004-0055. The comments (paraphrased in italics) are followed by our responses.

Major Issues

IBM Comment 1: IBM is concerned that they will not be able to meet the General Permit's limits of 5 ug/l each for Freon 113 and 1,1,1-trichloroethane (TCA). The Water Board required two primary offsite extraction wells (ORB-1 and ORB-7) to be maintained in operable condition so these can be reactivated in response to unanticipated increases in offsite groundwater chemical concentrations. The wells are located in residential areas. Due to the location and size of the wells, IBM finds it not feasible to install treatment facilities and/or collect a large volume of water and transport it for treatment prior to discharge. When last operated, sampling results from these wells for Freon 113 and 1,1,1-tricchloroethane (TCA) were above the 5 ug/l limits. IBM requests to maintain the current 50 ug/l value to allow the wells to be operated in the event unanticipated increases in offsite groundwater concentrations of these two chemicals occur.

If this is not possible, IBM requests to place these two wells in inactive status. In the event that chemical concentrations increase, IBM will request the Water Board an approval for temporary discharge to surface water to prevent undecided chemical migration.

Response: The General Permit was adopted more recently with standards which are more updated and more protective of water quality. Currently, we have 77 facilities, mostly from the Santa Clara County area, which are covered under this permit and are in compliance with the permit's limitations. These effluent limitations are necessary to protect beneficial uses of the most sensitive creeks in the region.

Our letter dated October 14, 2005, approved your request to curtail pumping of extraction wells ORB-1 and ORB-7. Although we do not anticipate that IBM will need to discharge from these wells, IBM should maintain the wells in operable condition into the foreseeable future and reactivate them, if and when necessary. In such case, a request to the Regional Water Board, for approval to temporarily discharge to surface water from these wells, would be an option.

IBM Comment No. 2: During the past two years, IBM exceeded one or two of the General Permit's limits. They cannot contain the large volume of water purged from these wells considering the residential location of these wells.

IBM requests to continue discharging from these wells using the existing NPDES permit discharge standards. Or, IBM be allowed to cease monitoring of these and other offsite wells, since cleanup criteria have been achieved.

Response: There are 77 dischargers under the General Permit, who have similar operations like IBM's facility, and who are in compliance with the General Permit's limitations. IBM should explore available technologies for treatment or pre-treatment of these related chemicals of concern.

Minor Issues

IBM Comment No. 3: Confirmation of concurrent issuance of coverage under the General Permit and inclusion of reinjection requirements under the existing SCR.

Response: Amendment of the SCR, to include reinjection requirements, and rescission of the individual permit are both scheduled for consideration at the December 13, 2006, Board meeting. Coverage under the General Permit will be issued upon submission of a complete NOI for the General Permit, due by April 30, 2007.

IBM Comment No. 4: Confirmation of issuance of General Permit coverage.

Response: See Response to Comment No. 3.

IBM Comment No. 5: Will the Board require IBM to prepare additional documents to provide certification of adequacy and reliability of their treatment facilities and that

prior to discharge under the GP, to demonstrate that their treatment systems constitute acceptable programs to minimize the discharge of toxic substances to State waters?

Response: Yes, IBM will have to recertify its facilities. However, IBM should be able to easily comply with this requirement using available data since its remediation systems have been operational for years.

IBM Comment No. 6: Will the Board require IBM to obtain authorization from other agencies for discharge of treated groundwater?

Response: If those other agencies (City of San Jose, and Santa Clara Valley Water District) require separate authorization to discharge to their systems, IBM must obtain such authorization. Neither coverage under the General Permit nor an individual permit substitutes for such authorization if the local agencies require it.

IBM Comment No. 7: Will the application renewal meet the Notice of Intent (NOI) requirement of the General Permit?

Response: No. While most of the information are the same, the NOI serves as IBM's statement of intent to comply with the General Permit. Therefore, IBM must submit an NOI.

IBM Comment No. 8: Will the Board require IBM to obtain authorization to use treatment chemicals?

Response: IBM may request authorization in its NOI. If approved, it will be specified in the Authorization to Discharge.

IBM Comment No. 9: IBM requests that the total flow rate limit be specified for the air stripper discharge and combined off-site well discharges.

Response: See Response to No. 8.

IBM Comment No. 10: IBM requests that discharges from the remediation systems be considered discharging to "Other Surface Water Areas".

Response: We cannot grant this request. IBM's discharges currently are to waterbodies with existing or potential "municipal and domestic supply" beneficial uses. Therefore, IBM will have to meet the limitations set under "Discharge to Drinking Water Areas".

IBM Comment No. 11: IBM requests that they retain their current limits of Freon and TCA for purposes of discharges from the off-site wells.

Response: Please refer to the 2nd paragraph of Response to Comment No. 1.

IBM Comment No. 12: Will the Board require IBM to submit a separate NOI?

Response: Yes. Please see Response to Comment No. 7.

IBM Comment No. 13: Same as No. 3.

Response: Please refer to Response to Comment No. 3.

IBM Comment Nos. 14,& 15: Will IBM be required to submit a separate NOI to indicate information as to the proposed discharge and specific information when they have been operating for many years?

Response: Yes. Please refer to Response to Comment No. 5.

IBM Comment No. 16: Will the Board modify the current SMP as part of the GP coverage?

Response: Any modification to the General Permit's Self-Monitoring Program (SMP) is provided for in E.17 of the General Permit, and will be addressed in the authorization letter.

A General Permit is established to cover facilities involved in the same substantially similar types of operations, discharge of the same types of wastes or engage in the same types of disposal practices, require the same effluent limitations, operation conditions, or standards for sewage disposal. Thus, they require the same monitoring.

The principal purposes of a self-monitoring program are: 1) to document compliance with the discharge requirements and prohibitions established by the Regional Water Board, 2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from the waste discharge, 3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment or toxicity standards, and other standards, and 4) to prepare waste and wastewater quality inventories.

IBM Comment No. 17: IBM requests to set the Zinc limit at 200 ug/l.

Response: Zinc is not an effluent limitation of the General Permit, but one of the Trigger Compounds. The specified set levels for these compounds trigger additional investigation and whether a permit limit is necessary. These trigger levels are not permit limits. At this point, ORB-1 and ORB-7 are already "inactive", and we do not anticipate any future discharge from these wells.

IBM Comment No. 18: IBM requests to clarify if sampling is required if there is no discharge to the storm drain.

Response: Please refer to Response to Comment No. 16.

IBM Comment No. 19: Will the Board eliminate the Startup Monitoring and Reporting since they have been in operations for years

Response: Please refer to 2nd paragraph, Response to Comment No. 16.

IBM Comment No. 20: Will IBM obtain pre-approval of the Board for chemical used for treatment and is this requirement intended to cover only chemicals which come in contact with the groundwater being treated?

Response: Please refer to Response to Comment No.8. This requirement is intended only to cover chemicals which come in contact with the groundwater being treated.